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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/528,261	03/17/2000	Barry L. Hass	2204/A01	4222
34845	7590	04/29/2005	EXAMINER	
STEUBING AND MCGUINNESS & MANARAS LLP			WILSON, ROBERT W	
125 NAGOG PARK			ART UNIT	
ACTON, MA 01720			PAPER NUMBER	

2661

DATE MAILED: 04/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/528,261

Applicant(s)

HASS, BARRY L.

Examiner

Robert W Wilson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31,33-37,39-43 and 46-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31,33-37,39-43 and 46-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____


PHIRIN SAM
PRIMARY EXAMINER

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Claim Rejections - 35 USC § 103

1.0 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2.0 Claims 1, 3-5, 10, 12-14, 19-28, 31, 34-6, 40-43, 46, 48-53, & 55-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lothberg (U.S. Patent No.: 6,804,776) in view of Rosen (IETF Multiprotocol Label Switching Architecture

Referring to claim 1, Lothberg teaches: Figure 2 shows a method of forwarding traffic from user network 110 (1st network) which is ATM per col. 2 line 20 through public network 130 via tunneling col. 2 lines 14-47 to a user network 120 (2nd network) which is also ATM per col. 2 line 20 per Fig 2. The reference teaches that a tunnel is established between the user network 110 (1st network) and user network 120 (2nd network) per Fig 2 and per col. 2 lines 14-47 which utilizes tunneling or a nonlabel switched network. The ATM packet's payload is encapsulated and the payload is preserved and forwarded per col. 2 lines 14-47.

Lothberg does not expressly call for: a first label switched network and a second label switched network but teaches a first and second ATM networks.

Rosen teaches: that the VPI/VCI in ATM header makes ATM label switched networks per Pg 9.

It would have been obvious to one of ordinary skill in the art at the time of the invention that the first and second networks of Lothberg are label switched networks.

Referring to claim 10, Lothberg teaches: A router (210 per Fig 2) which is device which has ATM switching forwarding logic for identifying an ATM which is to be sent to from User network 110 to user network 120 or next hop per Fig 2. The reference teaches that a tunnel is created by encapsulating the ATM packet by the router (encapsulating logic) between the user network 110 (1st network) and user network 120 (2nd network) per Fig 2 and per col. 2 lines 14-47 which utilizes tunneling or a nonlabel switched network. The ATM packet's payload is encapsulated and the payload is preserved and forwarded (forwarding logic) through the tunnel per col. 2 lines 14-47.

Lothberg does not expressly call for: a first label switched network and a second label switched network but teaches a first and second ATM networks.

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Rosen teaches: that the VPI/VCI in ATM header makes ATM label switched networks per Pg 9.

It would have been obvious to one of ordinary skill in the art at the time of the invention that the first and second networks of Lothberg are label switched networks.

Referring to claim 19, it is within the level of one switched in the art to implement the limitations of the device claims 10 in software or program product. It would have been obvious to one of ordinary skill in the art at the time of the invention to load the program code on a computer readable medium in order for it to be executable on a processor.

Referring to claims 20-27, it is within the level of one switched in the art to implement the limitations of the device claims 2-9 respectively into claims 20-27 respectively in software or program product. It would have been obvious to one of ordinary skill in the art at the time of the invention to load the program code on a computer readable medium in order for it to be executable on a processor.

Referring to claim 28, Figure 2 shows a method for establishing a path between user network 110 (1st network) which is ATM per col. 2 line 20 through public network 130 via tunneling col. 2 lines 14-47 to a user network 120 (2nd network) which is also ATM per col. 2 line 20 per Fig 2. The reference teaches that a tunnel is established between the user network 110 (1st network) and user network 120 (2nd network) per Fig 2 and per col. 2 lines 14-47 which utilizes tunneling or a nonlabel switched network. The ATM packet's payload is encapsulated and the payload is preserved and forwarded per col. 2 lines 14-47. The tunnel packet is received by user network 120 in a tunnel. The ATM packet is de-encapsulated and the de-encapsulated ATM cpacket is forwarded across network 120 per Fig 2.

Lothberg does not expressly call for: a first label switched network and a second label switched network but teaches a first and second ATM networks.

Rosen teaches: that the VPI/VCI in ATM header makes ATM label switched networks per Pg 9.

It would have been obvious to one of ordinary skill in the art at the time of the invention that the first and second networks of Lothberg are label switched networks.

Referring to claim 34, Lothberg teaches: 220 per Figure 2 shows a device for receiving traffic from user network 110 (1st network) which is ATM per col. 2 line 20 through public network 130 via tunneling col. 2 lines 14-47 to a user network 120 (2nd network) which is also ATM per col. 2 line 20 per Fig 2. The reference teaches that a tunnel is established between the user network 110 (1st network) and user network 120 (2nd network) per Fig 2 and per col. 2 lines 14-47 which utilizes tunneling or a nonlabel switched network. The ATM packet's payload is encapsulated and the payload is preserved and forwarded per col. 2 lines 14-47.

220 per Fig 2 is the device with receiving logic, de-encapsulating logic, and forwarding logic

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Lothberg does not expressly call for: a first label switched network and a second label switched network or logic but teaches a first and second ATM networks.

Rosen teaches: that the VPI/VCI in ATM header makes ATM label switched networks per Pg 9.

It would have been obvious to one of ordinary skill in the art at the time of the invention that the first and second networks of Lothberg are label switched networks. It is within the level of one skilled in the art at the time of the invention to implement the router in logic.

Referring to claim 40, It is within the level of one skilled in the art to implement the limitations of the device claims 28 in software or program product. It would have been obvious to one of ordinary skill in the art at the time of the invention to load the program code on a computer readable medium in order for it to be executable on a processor.

Referring to claims 41-43, it is within the level of one skilled in the art to implement the limitations of the method claims 3-4 & 8 respectively into claims 41-43 respectively in software or program product. It would have been obvious to one of ordinary skill in the art at the time of the invention to load the program code on a computer readable medium in order for it to be executable on a processor.

Referring to claim 46, Figure 2 shows a method of executing a system from user network 110 (1st network) which is ATM per col. 2 line 20 through public network 130 via tunneling col. 2 lines 14-47 to a user network 120 (2nd network) which is also ATM per col. 2 line 20 per Fig 2. The reference teaches that a tunnel is established between the user network 110 (1st network) and user network 120 (2nd network) via the router (210) or egress device router (220) or ingress device per Fig 2 and per col. 2 lines 14-47 which utilizes tunneling or a nonlabel switched network. The ATM packet's payload is encapsulated by the router (210 per Fig 2) or egress device and tunneled to router (220 per Fig 2) or ingress device. The ATM packet is de-encapsulated by the router (220 per Fig 2) or ingress device. Router (220 per Fig 2) or ingress device forward the packet over ATM user network 120 per Fig 2

Lothberg does not expressly call for: a first label switched network and a second label switched network but teaches a first and second ATM networks.

Rosen teaches: that the VPI/VCI in ATM header makes ATM label switched networks per Pg 9.

It would have been obvious to one of ordinary skill in the art at the time of the invention that the first and second networks of Lothberg are label switched networks.

Referring to claim 50, Lothberg teaches: Fig 2 shows a method of forwarding traffic from user network 110 (1st network) which is ATM per col. 2 line 20 through public network 130 via tunneling protocol per col. 2 lines 14-47 to a user network 120 (2nd network) which is also ATM per col. 2 line 20 per Fig 2. The reference teaches that a tunnel is established between the user

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network 110 (1st network) and user network 120 (2nd network) per Fig 2 and per col. 2 lines 14-47 which utilizes tunneling or a nonlabel switched network .

The ATM packet's payload is encapsulated and the payload is preserved and forwarded per col. 2 lines 14-47.

A protocol indicator is added for identifying the payload as ATM per col. 4 lines 50-60 or per col. 5 lines 36-67.

Lothberg does not expressly call for: a first label switched network and a second label switched network but teaches a first and second ATM networks or a computer program on a computer readable medium.

Rosen teaches: that the VPI/VCI in ATM header makes ATM label switched networks per Pg 9.

It would have been obvious to one of ordinary skill in the art at the time of the invention that the first and second networks of Lothberg are label switched networks. It is within the level of one skilled in the art to implement the method of Lothberg and Rosen in software or computer program. It would have been obvious to one of ordinary skill in the art at the time of the invention to load the program on a computer readable medium so that it would be executable on a processor.

Referring to claims 51, it is within the level of one skilled in the art to implement the limitations of the method claims 4 & 6 respectively into claims 51 & 52 respectively in software or program product. It would have been obvious to one of ordinary skill in the art at the time of the invention to load the program code on a computer readable medium in order for it to be executable on a processor.

Referring to claim 53, Figure 2 shows a communication system from user network 110 (1st network) which is ATM per col. 2 line 20 through public network 130 via tunneling col. 2 lines 14-47 to a user network 120 (2nd network) which is also ATM per col. 2 line 20 per Fig 2.

The reference teaches that a tunnel is established between the user network 110 (1st network) and user network 120 (2nd network) via the router (210) or egress device to router (220) or ingress device per Fig 2 and per col. 2 lines 14-47 which utilizes tunneling or a nonlabel switched network .

The ATM packet's payload is encapsulated by the router (210 per Fig 2) or egress device and forwarded via tunneled to router (220 per Fig 2) or ingress device. The ATM packet is de-encapsulated by the router (220 per Fig 2) or ingress device. Router (220 per Fig 2) or ingress device forward the packet over ATM user network 120 per Fig 2

Lothberg does not expressly call for: a first label switched network and a second label switched network but teaches a first and second ATM networks.

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Rosen teaches: that the VPI/VCI in ATM header makes ATM label switched networks per Pg 9.

It would have been obvious to one of ordinary skill in the art at the time of the invention that the first and second networks of Lothberg are label switched networks.

Referring to claim 57, Figure 2 shows a communication system from user network 110 (1st network) which is ATM per col. 2 line 20 through public network 130 via tunneling col. 2 lines 14-47 to a user network 120 (2nd network) which is also ATM per col. 2 line 20 per Fig 2. User network 110 (1st domain) which is ATM per col. 2 line 20 which has a plurality of ATM devices (111-113) and has router (210) or egress device per Fig 2. User network 120 (2nd domain) which is ATM per col. 2 line 20 which has a plurality of devices (121-123) and router (220) or ingress device per Fig 2. A public network (130) via tunneling col. 2 lines 14-47 or non label switched domain which has a plurality of forwarding devices (140) coupled to router (210) or egress device and router (220) or ingress device per Fig 2. The router (210) or egress device establishes a tunnel, encapsulated the ATM packet and forwards the ATM packet to ATM User Network 120 per Fig 2. The router 220 (220) or ingress device receives the encapsulated ATM packet from the tunnel, de-encapsulates, and forwarded the ATM packet.

Lothberg does not expressly call for: a first label switched network and a second label switched network but teaches a first and second ATM networks.

Rosen teaches: that the VPI/VCI in ATM header makes ATM label switched networks per Pg 9.

It would have been obvious to one of ordinary skill in the art at the time of the invention that the first and second networks of Lothberg are label switched networks.

In Addition Lothberg teaches:

Regarding claim 3, 12, 31, 35, & 55; IP per col. 1 lines 61-64 or col. 4 lines 15-24.

Regarding claim 4, 13, 36, 49, & 56; IP GRE per col. 1 lines 61-64 or col. 4 lines 15-24.

Regarding claim 5 & 14; a PID in which the second label switched domain can identify the packet as an ATM packet which has a VPI/VCI or label stack per col. 4 line 44-col. 6 line 7.

3.0 Claims 2, 6-9, 11, 15-18, 29-30, 33, 37, 39, 48, & 54 are rejected under 35 U.S.C. 103(a)

as being unpatentable over Lothberg (U.S. Patent No.: 6,804,776) in view of Rosen (IETF

Multiprotocol Label Switching Architecture in view of LE FAUCHEUR, IETF Multiprotocol

Label Switching (MPLS) Architecture

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Referring to claims 2, 11, & 30; the combination of Lothberg and Rosen teach: the method according to claim 1 device of claim 10 , and method of claim 28,

The combination of Lothberg and Rosen do not expressly call for: mapping a top label but teaches mapping of header which has a VPI/VCI into UTE per 330 per Fig 3.

LE FAUCHEUR teaches: that the VPI/VCI is the label per Para 2.17 Pg 10 which is a single label per Para 2.6 Pg 8 or top label in a single label stack.

It would have been obvious to add the top label processing of LE FAUCHEUR to the method of Lothberg and Rosen in order to implement a system which is standards compliant.

Referring to claims 6 & 15; the combination of Lothberg and Rosen teach: the method according to claim 1 and device of claim 10,

The combination of Lothberg and Rosen do not expressly call for: the first label switched domain to be MPLS but teaches ATM in the first domain

LE FAUCHEUR teaches: MPLS can be performed on any layer 2 transport per Abstract or Para 2.23.2 per Pgs 13-14.

It would have been obvious to add the MPLS of LE FAUCHEUR to the method of Lothberg and Rosen in order to implement a system which can switch packets faster than traditional ATM through label switching and also standards compliant.

Regarding claims 7, 16, & 33; the combination of Lothberg and Rosen teach: the method according to claim 1 device of claim 10, & method according to claim 29,

The combination of Lothberg and Rosen do not expressly call for: the second label switched domain to be MPLS but teaches ATM in the second domain

LE FAUCHEUR teaches: MPLS can be performed on any layer 2 transport per Abstract or Para 2.23.2 per Pgs 13-14.

It would have been obvious to add the MPLS of LE FAUCHEUR to the method of Lothberg and Rosen in order to implement a system which can switch packets faster than traditional ATM through label switching and also standards compliant.

Regarding claims 8, 17, 29, 37, 48, & 54; the combination of Lothberg and Rosen teach: the method according to claim 1, device of claim 10, method of claim 28, device of claim 34, and system of claim 53;

The combination of Lothberg and Rosen do not expressly call for: the first and second domain to be second label switched domain to be MPLS but teaches ATM in the first and second domains

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LE FAUCHEUR teaches: MPLS can be performed on any layer 2 transport per Abstract or Para 2.23.2 per Pgs 13-14.

It would have been obvious to add the MPLS of Faucheur to the method of Lothberg and Rosen in order to implement a system which can switch packets faster than traditional ATM through label switching in both the first and second domain and also standards compliant.

Regarding claims 9, 18, 33, & 39 the combination of Lothberg, Rosen, LE FAUCHEUR teaches: the method according to claim 8, device of claim 17, method of claim 29, and device of claim 37; and encapsulating the packet and label such that the second domain will recognize an ATM or label switched packet via a PID.

The combination of Lothberg, Rosen, and LE FAUCHEUR do not expressly call for: MPLS identifier but teaches PID to identify the type of packet

It would have been obvious to one of ordinary skill in the art at the time of the invention to add MPLS identifier in addition to the other packet identifiers of the combination of Lothberg, Rosen and LE FAUCHEUR because it is just another type of ATM packet.

Response to Amendment

4.0 Applicant's arguments with respect to claims 1-31, 33-37, 39,43, & 46-57 are moot in view of the new ground(s) of rejection. Please refer to the above rejection for details.

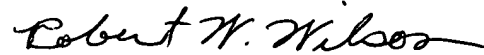
Conclusion

5.0 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W Wilson whose telephone number is 571/272-3075. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on 571/272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Robert W Wilson
Examiner
Art Unit 2661

RWW
4/25/05



PHIRIN SAM
PRIMARY EXAMINER